

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions and listings of claims in the application:

Claim 1 (currently amended): A transgenic plant cell wherein ~~the genome of~~ said cell comprises an expression cassette, the expression cassette comprising a nucleic acid molecule ~~wherein said nucleic acid molecule is selected from the group consisting of:~~

- i) a nucleic acid molecule comprising ~~a nucleic acid sequence as represented in~~ SEQ ID NO: 1 and SEQ ID NO: 3;
- ii) a nucleic acid molecule comprising nucleic acid sequences that encode the same amino acid sequences as SEQ ID NO: 1 and SEQ ID NO: 3;
- iii) a nucleic acid molecule comprising SEQ ID NO: 1 and SEQ ID NO: 5;
- iv) a nucleic acid molecule comprising nucleic acid sequences that encode the same amino acid sequences as SEQ ID NO: 1 and SEQ ID NO: 5;
- v) a nucleic acid molecule comprising SEQ ID NO: 1, SEQ ID NO: 3 and SEQ ID NO: 3; and
- vi) a nucleic acid molecule comprising nucleic acid sequences that encode the same amino acid sequences as SEQ ID NO: 1, SEQ ID NO: 3 and SEQ ID NO: 5.
- ~~ii) a nucleic acid molecule comprising a nucleic acid sequence which hybridises to the sequence in (i) above and which glucosylates at least one monolignol; or~~
- ~~iii) a nucleic acid molecule comprising a nucleic acid sequences which are i degenerate as a result of the genetic code to the sequences defined in (i) and (ii) above.~~

Claims 2 and 3 (cancelled).

Claim 4 (currently amended): The plant cell according to claim 1, wherein said nucleic acid is cDNA.

Claim 5 (currently amended): The plant cell according to claim 1, wherein said nucleic acid is genomic DNA.

Claims 6 and 7 (cancelled).

Claim 8 (currently amended): The cell plant according to claim 1 wherein said nucleic acid molecule is over expressed.

Claim 9 (cancelled).

Claim 10 (withdrawn): The cell according to Claim 8 wherein said cell over-expresses a nucleic acid molecule as represented by the nucleic acid sequence shown in SEQ ID NO: 3 and SEQ ID NO: 5, or a nucleic acid molecule which hybridises to a nucleic acid molecule as represented by the nucleic acid sequence in SEQ ID NO: 3 and SEQ ID NO: 5.

Claim 11 (currently amended): The plant cell according to claim 1 wherein the expression of said nucleic acid molecule is down-regulated to reduce glucosyltransferase activity in said cell.

Claim 12 (currently amended): The plant cell according to Claim 11 wherein said down-regulation is as a result of said cell being null for a nucleic acid molecule selected from the group consisting of;

- i) a nucleic acid molecule comprising ~~a nucleic acid sequence as represented in SEQ ID NO: 1; and~~
- ii) ~~a nucleic acid molecule comprising a nucleic acid sequence which hybridises to the sequence in (i) above;~~
- iii) ii) a nucleic acid molecule comprising a nucleic acid sequences which are degenerate as a result of the genetic code to the sequences defined in (i) and (ii) above that encodes the same amino acid sequence as SEQ ID NO: 1.

Claim 13 (currently amended): The plant cell according to Claim 11 wherein said down-regulation is as a result of said cell being null for a nucleic acid molecule selected from the group consisting of;

- i) a nucleic acid molecule comprising ~~a nucleic acid sequence as represented in SEQ ID NO: 1 and SEQ ID NO: 3 and/or SEQ ID NO: 5;~~
- ii) a nucleic acid molecule comprising nucleic acid sequences that encode the same amino acid sequences as SEQ ID NO: 1 and SEQ ID NO: 3;
- iii) a nucleic acid molecule comprising SEQ ID NO: 1 and SEQ ID NO: 5;
- iv) a nucleic acid molecule comprising nucleic acid sequences that encode the same amino acid sequences as SEQ ID NO: 1 and SEQ ID NO: 5;
- v) a nucleic acid molecule comprising SEQ ID NO: 1, SEQ ID NO: 3 and SEQ ID NO: 3; and
- vi) a nucleic acid molecule comprising nucleic acid sequences that encode the same amino acid sequences as SEQ ID NO: 1, SEQ ID NO: 3 and SEQ ID NO: 5.
- ~~ii) a nucleic acid molecule comprising a nucleic acid sequence which hybridizes to the sequence in (i) above;~~
- ~~iii) a nucleic acid molecule comprising a nucleic acid sequences which are degenerate as a result of the genetic code to the sequences defined in (i) and (ii) above.~~

Claim 14 (withdrawn): The cell according to Claim 11 wherein said down-regulation is the result of said cell being null for a nucleic acid molecule comprising a nucleic acid sequence as shown in SEQ ID NO: 3 and SEQ ID NO: 5, or a nucleic acid molecule which hybridises to a nucleic acid molecule comprising a nucleic acid sequence as shown in SEQ ID NO: 3 and SEQ ID NO: 5.

Claim 15 (currently amended): The plant cell according to Claim 11 wherein ~~said cell is transformed with a nucleic acid molecule comprising an expression cassette which cassette comprises a nucleic acid sequence selected from the group consisting of:~~

- i) ~~a nucleic acid molecule comprising a nucleic acid sequence as represented in SEQ ID NO: 1;~~
- ii) ~~a nucleic acid molecule comprising a nucleic acid sequence which hybridises to the sequence in (i) above and which glucosylates at least one monolignol;~~
- iii) ~~ii) a nucleic acid molecule comprising a nucleic acid sequences sequence which are is degenerate as a result of the genetic code to the sequences defined in (i) and (ii) above~~

wherein said cassette is adapted such that both sense and antisense nucleic acid molecules are transcribed from said cassette.

Claim 16 (currently amended): The plant cell according to Claim 15 wherein said cassette is provided with at least two promoters adapted to transcribe sense and antisense strands of said nucleic acid molecule.

Claim 17 (currently amended): The plant cell according to Claim 15 wherein said cassette comprises a nucleic acid molecule wherein said molecule comprises a first part linked to a second part wherein said first and second parts are complementary over at least part of their sequence and further wherein transcription of said nucleic acid molecule produces an RNA molecule which forms a double stranded region by complementary base pairing of said first and second parts.

Claim 18 (currently amended): The plant cell according to Claim 17 wherein said first and second parts are linked by at least one nucleotide base.

Claims 19 and 20 (cancelled).

Claim 21 (currently amended): The plant cell according to claim 12 wherein said expression cassette is part of a vector.

Claims 22 and 23 (cancelled).

Claim 24 (currently amended): A transgenic plant comprising the cell according to Claim [[23]]
1.

Claim 25 (currently amended): The plant according to Claim 24 wherein said plant is a woody plant selected from: poplar; eucalyptus; Douglas fir; pine; walnut; ash; birch; oak; teak; and spruce.

Claim 26 (withdrawn - currently amended): A method for modulating the lignin content of a plant comprising;

- i) providing the plant cell of claim 1, and
- ii) providing conditions conducive to growth of said plant cell into a plantlet ~~and optionally;~~
- iii) ~~determining the lignin content of said plant.~~

Claim 27 (withdrawn): A method of manufacture of paper or board from a transgenic plant exhibiting an altered lignin content comprising;

- i) pulping the transgenic wood material derived from the transgenic plant according to Claim 24 ; and
- ii) producing paper from said pulped transgenic wood material.

Claim 28 (cancelled).